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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,768

05/18/2006

Satoshi Mihara

21713-00058-US1

3575

30678

7590

11/18/2009

CONNOLLY BOVE LODGE & HUTZ LLP  
1875 EYE STREET, N.W.  
SUITE 1100  
WASHINGTON, DC 20006

EXAMINER

BUIE-HATCHER, NICOLE M

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

11/18/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,768	<b>Applicant(s)</b> MIHARA ET AL.	
	<b>Examiner</b> NICOLE M. BUIE-HATCHER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20091029</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### ***Response to Amendment***

The amendment filed 10/29/2009 has been entered. Claims 6-8 remain pending.

The indicated allowability of claims 6-8 is withdrawn in view of the newly discovered reference(s) to EP 1270657 A1 which was cited on the information disclosure statement filed 10/29/2009. Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1270657 A1 (See machine translation for citation).

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**Regarding claim 6**, EP '657 discloses a rubber composition [0005] comprising 30-90 phr of a coupled solution-polymerized styrene-butadiene copolymer, 10-70 phr of other diene rubber, 20-100 phr of silica which is within the claimed range, and 1 to 15 phr of silane coupling agent. The other diene may be a natural rubber [0013]. Preferably, the silane coupling agent is 3-(S-octanoylthio)-propyltiethoxysilane [0021]. The silane coupling agent is reacted with the silica during mixing the rubber or already before the addition of the silica to the rubber in the sense of pretreatment [0019].

However, EP '657 does disclose the bulk density retention rate of the surface treated silica. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients and a similar way of making the surface treated silica as in the instant specification (See [0021] of the corresponding PG Pub). Therefore, the claimed effects and physical properties, i.e. bulk density retention rate would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

**Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1270657 A1 (See machine translation for citation).

**Regarding claim 7**, EP '657 discloses a rubber composition [0005] comprising 30-90 phr of a coupled solution-polymerized styrene-butadiene copolymer (Since the polybutadiene

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rubber is not described in the instant claim, the polybutadiene rubber may also be a copolymer), 10-70 phr of other diene rubber, 20-100 phr of silica which is within the claimed range, and 1 to 15 phr of silane coupling agent. The other diene may be a natural rubber [0013]. Preferably, the silane coupling agent is 3-(S-octanoylthio)-propyltriethoxysilane [0021]. The silane coupling agent is reacted with the silica during mixing the rubber or already before the addition of the silica to the rubber in the sense of pretreatment [0019].

However, EP '657 does disclose the bulk density retention rate of the surface treated silica. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients and a similar way of making the surface treated silica as in the instant specification (See [0021] of the corresponding PG Pub). Therefore, the claimed effects and physical properties, i.e. bulk density retention rate would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

**Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1270657 A1 as applied to claim 7 above, and further in view of Kan et al. (US 4,444,236) as evidenced by Kan et al. (US 4,417,027).

**Regarding claim 8**, EP '657 discloses a rubber composition as shown above in claim 7.

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However, EP '657 does not disclose the glass-transition temperature of the styrene-butadiene copolymer. Kan et al. teaches a solution polymerized star shaped SBR containing less than 20% of styrene and vinyl less than 50% with a glass transition temperature less than 50°C (claim 4). EP '1270657 and Kan et al. (US '236) are analogous art concerned with the same field of endeavor, namely tire tread compositions comprising a solution polymerized styrene-butadiene polymer with the rubber having comparable amounts of styrene and butadiene units. It would have been obvious to one of ordinary skill in the art at the time of invention to substitute the styrene-butadiene copolymer of EP '657 with one as taught by Kan et al. (US '236), and the motivation to do so would have been as Kan et al. (US '027) suggests preventing mechanical cracks (C3/L30-C4/L13).

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE-HATCHER whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

/N. M. B./  
Examiner, Art Unit 1796  
11/4/2009